



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

20NR-84B
Job Sheet 195179



Part No: 20NR-84B

Job Qty: 10 pcs

Part Name: Spacer Dual Cage 4, 5/8" hole



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 5/15/19

Job Tracking No:

Created By: Jennifer Renwick

Due Date: 5/23/19

Description:

Type: SOLD

Note: DWG 20NR-84B Rev 2 IPP Rev. A 19.05.15 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
100	SL-154 - 1	10 pcs	5/23/19	5/23/19	0.00	2.50	SL-154 - 1	ASP 19/05/19
110	QC 2	10 pcs	5/23/19	5/23/19	0.00	0.00	QC 2 - 1	
							QC 2 - 12	
							QC 2 - 14	
							QC 2 - 17	
							QC 2 - 19	
							QC 2 - 2	
							QC 2 - 20	
							QC 2 - 22	
							QC 2 - 23	
							QC 2 - 25	
							QC 2 - 32	
							QC 2 - 33	ASP 19/05/19
							QC 2 - 35	
							QC 2 - 39	
							QC 2 - 4	
							QC 2 - 40	
							QC 2 - 44	
							QC 2 - 45	
							QC 2 - 48	
							QC 2 - 49	
							QC 2 - 50	
							QC 2 - 51	
							QC 2 - 52	
							QC 2 - 57	
							QC 2 - 62	
							QC 2 - 63	
							QC 2 - 8	
							QC 2 - 66	
							QC 2 - 64	
							QC 2 - 65	
							QC 2 - 5	
							QC 2 - 71	
120	QC 8	10 pcs	5/23/19	5/23/19	0.00	0.00	QC 8 - 12	
							QC 8 - 14	
							QC 8 - 17	
							QC 8 - 20	
							QC 8 - 25	
							QC 8 - 3	
							QC 8 - 32	
							QC 8 - 33	
							QC 8 - 35	



Container No: S182301



Part: 20NR-84B

Job No: 195179

Serial No/Batch: S182301

Revision: 2

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 05/17/19

				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	DAS
				QC 8 - 52	52
				QC 8 - 23	9.89
125	Outsource - 1 - Heat Treat	10 pcs	5/23/19	ME1001-VC	17/05/17
130	Packaging 2-1 - Receive - B4B	10 pcs	5/23/19	0.00 0.00	ATLOC MAY 2019-05-17
				Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
140	QC 6	10 pcs	5/23/19	0.00 0.00	
				QC 6 - 9	
				QC 6 - 68	DAS
				QC 6 - 61	61
				QC 6 - 40	9.89
150	Outsource - 15 - Nickel Plate	10 pcs	5/23/19	GRO002-VC	MAY 2019-05-31
160	Packaging 2-2 - Receive - B4B	10 pcs	5/23/19	0.00 0.00	
				Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	

				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
170	QC 6	10 pcs	5/23/19	0.00 0.00	QC 6 - 9
					QC 6 - 68
					QC 6 - 61
					QC 6 - 40
180	Packaging 3-1 - Stock - B4B	10 pcs	5/23/19	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 - B4B
					Packaging 3 - 17 - B4B
					Packaging 3 - 18 - B4B
					Packaging 3 - 19 - B4B
					Packaging 3 - 20 - B4B
					Packaging 3 - 21 - B4B
					Packaging 3 - 22 - B4B
					Packaging 3 - 23 - B4B
					Packaging 3 - 24 - B4B
					Packaging 3 - 25 - B4B
					Packaging 3 - 26 - B4B
					Packaging 3 - 27 - B4B
					Packaging 3 - 28 - B4B
					Packaging 3 - 29 - B4B
					Packaging 3 - 30 - B4B
					Packaging 3 - 31 - B4B
					Packaging 3 - 32 - B4B
					Packaging 3 - 33 - B4B
					Packaging 3 - 34 - B4B
					Packaging 3 - 35 - B4B
					Packaging 3 - 36 - B4B
190	QC 21 - SA	10 pcs	5/23/19	0.00 0.00	QC 21 - SA - 21
					QC 21 - SA - 70
					QC 21 - SA - 53
Part Op 100 - 1-Machine as per folio FC 800 FOLIO REV: <u> A4 </u> DWG REV: <u> 2 </u> 2-Pass oversized tap H11 + Descriptions: 0.005" by hand, 3-Deburr ***No go gage should be tight*** 125 - 1-Issue P/O; _____ RC 33-37 2-Bead blast 3--Material type; 1045 4- Certificate of Conformity is required					

5/15/2019

[Dart Hawkesbury] Job Sheet - Renwick, Jennifer

150 - -Issue P/O: _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Material type; 1045 -Certificate of Conformity is required

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
8279T14	High Strength 1045 Carbon Steel Rod with Decarb-Free Surface, 1-1/2" Diameter, 6ft Long	3,3900 ft (.339 ea)	100-SL-154 - 1	5181336

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-SL-154 - 1	8279T14	3	13	0

Part Specifications

Specifications could not be found.

Plex 5/15/19 10:51 AM Dart.Renwick.Jennifer



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043497



Supplier: ATL002-VC
Atlantic Heat Treat 2001
401 Frankcom
Ajax
ON
L1S 1R4 Canada
Phone: 866 257 6395

Attention: Ananth, Nimmy

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB043497

PO Date: 5/17/19

Due Date: 5/22/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Guerin, Kimberley
kguerin@dartaero.com

Pynt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	195178	20NR-84A	Spacer for Dual Cage 4 1-Issue P/O; Heat treat to RC 33-37 2-Bead blast 3-Material type; 1045 4-Certificate of Conformity is required	Firmed	-	5/22/19	10 pcs	0 pcs	10 pcs	\$8.95/pcs	\$89.50
2	195179	20NR-84B	Spacer Dual Cage 4, 5/8" hole 1-Issue P/O; RC 33-37 2-Bead blast 3-Material type; 1045 4- Certificate of Conformity is required	Firmed	-	5/22/19	4 pcs	0 pcs	4 pcs	\$22.375/pcs	\$89.50

Grand Total: \$179.00

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 5/28/19 10:57 AM Dart.Guerin.Kimberley

Shipping Ticket

Sold To: 1448**DART AEROSPACE LTD.**
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Ship To: 163438**DART AEROSPACE LTD.**
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Page 1 of 1

Purchase Order Number	Packing List No	Customer Job No	Route	Carrier
POHB043497 ✓				

Quantity	Part No. / Part Name / Part Description	Pounds
✓ 4 PCS	MATERIAL 1045 CASE HARDEN TO 0.030", 33-37RC SANDBLAST, C OF C, PRT# 20NR-84B, JOB# 195179 ✓	

Container Type	# Of Containers	Cust Cont Id	Container Type	# Of Containers	Cust Cont Id
BOX	1				

NOTICE: OUR LIABILITY IS LIMITED TO OUR INVOICE CHARGES ONLY

DAS
61
9-89

Shipped Complete

Quantity Shipped:

4

Pounds Shipped:

8.00

RECEIVED

MAY 28 2019

DART AEROSPACE LTD.

AB

37RC

5-27-19

Order No.: 166512

Shipped Complete

Quantity Shipped:

4.00

Received By:

Date:

Pounds Shipped:

8.00

Sold To: DART AEROSPACE LTD.

Shipped ON: 05/22/2019

Certification

Date: 05/27/2019

Entry Date: 05/22/2019

Page: 1 of 1

To:DART AEROSPACE LTD.
1270 ABERDEEN ST

Purchase Order No.: POHB043497 ✓

Packing List No.:

HAWKESBURY ON K6A 1K7

Material: 1045

We are pleased to provide you with the following Certificate of Compliance.

Quantity	Part Number / Part Name / Part Description	Pounds
✓ 4	4 PCS MATERIAL 1045 CASE HARDEN TO 0.030", 33-37RC SANDBLAST, C OF C, PRT# 20NR-84B, JOB# 195179 ✓	8

Insp. Type	Scale	Minimum	Maximum	Number	Other
<u>Customer Requirements:</u>					

RC rockwell .03

Results:Harden ROCKWE 33. 37. 37. TESTED AS PER SAMPLING PLAN
HEAT TREATED TO 37 RC AS PER CUSTOMER REQUESTDAS
61
9-89

STATEMENT OF LIMITED LIABILITY (PLEASE READ CAREFULLY). ALL WORK IS ACCEPTED SUBJECT TO THE FOLLOWING CONDITIONS: It is recognized that even after employing all the scientific methods known to us, hazards still remain in metal treating. THEREFORE, OUR LIABILITY SHALL NOT EXCEED TWICE THE AMOUNT OF OUR CHARGES FOR THE WORK DONE ON ANY MATERIAL (FIRST TO REIMBURSE FOR THE CHARGES AND SECOND TO COMPENSATE IN THE AMOUNT OF THE CHARGES), EXCEPT BY WRITTEN AGREEMENT SIGNED BY THE METAL TREATER. THE CUSTOMER, BY CONTRACTING FOR METAL TREATMENT, AGREES TO ACCEPT THE LIMITS OF LIABILITY AS EXPRESSED IN THIS STATEMENT TO THE EXCLUSION OF ANY AND ALL PROVISIONS AS TO LIABILITY ON THE CUSTOMER'S OWN INVOICES, PURCHASE ORDERS OR OTHER DOCUMENTS. IF THE CUSTOMER DESIRES HIS OWN PROVISIONS AS TO LIABILITY TO REMAIN IN FORCE AND EFFECT, THIS MUST BE AGREED TO IN WRITING, SIGNED BY AN OFFICER OF THE TREATER. IN SUCH EVENT, A DIFFERENT CHARGE FOR OUR SERVICES REFLECTING THE HIGHER RISK TO TREATER, SHALL BE DETERMINED BY THE TREATER AND CUSTOMER. THE TREATER MAKES NO EXPRESS OR IMPLIED WARRANTIES AND SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF THE FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, AS TO THE PERFORMANCE OF CAPABILITIES OF THE MATERIAL AS HEAT TREATED, OR THE HEAT TREATMENT. THE AFOREMENTIONED LIMITATION OF LIABILITY STATED ABOVE IS SPECIFICALLY IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND OF ANY OTHER SUCH OBLIGATION ON THE PART OF THE TREATER. No claim for shortage in weight or count will be entertained unless presented within five (5) working days after receipt of materials by customer. No claim will be allowed for shrinkage, expansion, deformity, or rupture of material in treating or straightening, except by prior written agreement, as above, nor in any case for rupture caused by or occurring during subsequent grinding. Whenever we are given material with detailed instructions as to treatment, our responsibility shall end with the carrying out of those instructions. Failure by a customer to indicate plainly and correctly the kind of material (i.e., proper alloy designation) to be treated, shall cause an extra charge to be made to cover any additional expense incurred as a result thereof, but shall not change the limitation of liability stated above. Customer agrees there will be no liability on the treater in contract for any special, indirect or consequential damages arising whatsoever, including but not limited to personal injury, property damage, loss of profits, loss of production, recall or any other losses, expenses or liabilities allegedly occasioned by the work performed on the part of the treater. It shall be the duty of the customer to inspect the merchandise immediately upon its return, and in any event claims must be reported prior to the time that any further processing, assembling or any other work undertaken. OUR LIABILITY TO OUR CUSTOMERS SHALL CEASE ONCE ANY FURTHER PROCESSING, ASSEMBLING OR ANY OTHER WORK HAS BEEN UNDERTAKEN ON SAID MATERIAL. No agent or representative is authorized to alter the above conditions, except by writing duly signed by an officer of treater.


KEAN SHEPHERD
QUALITY CONTROL
ATLANTIC HEAT TREATING 2001 LTD



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043596



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB043596

PO Date: 5/31/19

Due Date: 6/7/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
2019-06-03

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	195179	20NR-84B	Spacer Dual Cage 4, 5/8" hole -Issue P/O; -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 -Bake after plating -Material type; 1045 -Certificate of Conformity is required	Firmed	-	6/4/19	4 pcs	0 pcs	4 pcs	\$9.2307/pcs	\$36.92
Line Item Note ****REQUIRED A.S.A.P****											
2	R194439	20NR-84A	Spacer for Dual Cage 4 -Issue P/O -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 - Bake After Plating - Certificate of Conformity is required	Firmed	-	6/7/19	2 pcs	0 pcs	2 pcs	\$9.2307/pcs	\$18.46
3	193465	C45-15-6	Bushing, Lifting Outside Processing - Nickel Plate)ISSUE P/O TO GROUPE ALTECH: QQ-N-290, CLASS 2 GRADE E OR F. NICKEL PLATE TO .0004-.0006 BAKE AFTER PLATING C OF C IS REQUIRED	Firmed	-	6/7/19	20 pcs	0 pcs	20 pcs	\$9.2307/pcs	\$184.61
Grand Total:											\$240.00



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043596



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

A handwritten signature in blue ink, appearing to be "JL" or "JLH", located to the right of the Procurement Quality Clauses list.

Plex 6/3/19 8:46 AM Dart.Guerin.Kimberley



Certificat de Conformité / Certificate of Compliance

(019659-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
Tel: 514-335-3666 Fax: 514-335-3868
www.groupaltech.com

Bon de Livraison / Packing Slip

019659 - 1

Livré à / Ship to

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON, K6A1K7
CANADA
Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON, K6A1K7
CANADA
BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
05-Jun-2019		SPARTAKOS BOUNTOURIS		POHB043596				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	20NR-84B Rev.	20NR-84B 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006 THICK BAKE AFTER PLATING	E-NICKEL STEEL CH	4	4	0	0	0
2	20NR-84A Rev.	20NR-84A 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290, CLASS 2, GRADE E OR F THICKNESS 0.0004-0.0006 BAKE AFTER PLATING	E-NICKEL STEEL CH	2	2	0	0	0
3	C45-15-6 Rev.	C45-15-6 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290 CLASS 2 GRADE E OR F NICKEL PLATE TO 0.0004-0.0006 THICK BAKE AFTER PLATING	E-NICKEL STEEL CH	20	20	0	0	0

RECEIVED

JUN 05 2019

DART AEROSPACE LTD.

Notes Additionnelles / Additional Notes

3 small boxes

Épaisseur réelle
Actual ThicknessInspecteur Qualité
Quality InspectorRéçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been processed in accordance with your purchase order and specifications and are in conformance with your requirements.
Our financial and legal responsibility will not be higher than the amount of invoice.